

REMARKS

Claims 1-24 are pending.

Claims 1-2, 4-14 and 16-24 stand rejected.

Claims 3 and 15 are objected to.

Applicant thanks the Examiner for discussing the present Office Action, and in particular, the claim objections, the rejections under 35 U.S.C. §112, and the rejections under 35 U.S.C. §102, with Applicant's attorney, on October 29, 2004.

I. DRAWINGS

The Examiner has objected to Figure 3 because the reference sign "T9" should be "T7". The Examiner has further objected to Figure 7 because the reference sign "Out" should be "OutB." The Examiner has further objected to Figures 6A-B for missing a label for elements 601A-J. In response, Applicant has amended Figure 3 to include the appropriate reference sign "T7," Figure 7 to include the appropriate reference sign "OutB," and Figures 6A-B by adding the label of "Latch" to elements 601A-J.

The Examiner has further objected to Figures 6A and 6B for not being discussed in the Specification. Applicant has amended the Specification to refer to Figure 6 as Figures 6A-B.

II. SPECIFICATION

The Examiner has objected to the Specification for not including the serial numbers of the referenced related applications. Applicant has amended the Specification to include the serial number or the U.S. patent number of the referenced application.

The Examiner has further objected to the Specification to replace the term "generator" on page 6, line 19 of the Specification with the term "generation."

Applicant has amended the Specification by deleting the sentence containing the term "generator."

The Examiner has further objected to the Specification to replace the term "sate/retiming" on page 22, line 14 of the Specification with the term "state/retiming." Applicant has amended the Specification accordingly.

The Examiner has further objected to the Specification to replace the term "Claims" with the phrase "We claim." Applicant has amended the Specification accordingly.

III. CLAIM OBJECTIONS

The Examiner has objected to claims 1-24 for informalities listed on page 4 of the Office Action. Applicant has amended claims 3, 14 and 15 as suggested by the Examiner. Applicant, however, did not amend claims 1, 7, 9, 13, 14, 19, and 21 as Applicant believes that the claim language as written is clear. More specifically, with respect to claims 1-2 and 13-14, Applicants have amended the claims to correct the typographical mistakes regarding the recitation of "a period." Regarding claims 7, 9, 19 and 21, Applicants believe that "said first unit" is proper, and do not understand what the Examiner means by "'said first unit' appears to read 'said retiming mechanism.'"

Applicant notes that claims 2-3, 14, 15 and 20 have been amended to correct typographical mistakes and not to overcome prior art. Hence, no prosecution history estoppel arises from the amendments to claims 3, 14 and 15. *Festo Corp v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 62 U.S.P.Q.2d 1705, 1711-1712 (2002); 56 U.S.P.Q.2d 1865, 1870 (Fed. Cir. 2000). Further, the amendments made to claims 3, 14 and 15 were not made for a substantial reason related to patentability and therefore no prosecution history estoppel arises from such amendments. *See Festo Corp.*,

62 U.S.P.Q.2d 1705 at 1707 (2002); *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 41 U.S.P.Q.2d 1865, 1873 (1997).

IV. REJECTIONS UNDER 35 U.S.C. §112

The Examiner has rejected claims 4-11 and 16-23 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the Examiner asserts that the phrase "particular synchronization/retiming state pair" is unclear.

A rejection under 35 U.S.C. §112, second paragraph, is not appropriate, when the scope of the claimed subject matter can be determined by one having ordinary skill in the art. M.P.E.P. §706.03(d). Applicant respectfully traverses the Examiner's assertion that the phrase "particular synchronization/retiming state pair" cannot be determined by one having ordinary skill in the art. Applicant kindly directs the Examiner's attention to page 7, line 2 – page 11, line 5 of the Specification, which describes, in part, that a synchronization state refers to an indication as to which phase of the clock generated by an oscillator is the appropriate one to assert at a given transition of serial data. The cited passage in the Specification further describes that a retiming state refers to an indication as to which phase of the clock generated by the oscillator is the appropriate one to assert to sample the serial data during a particular period of the serial data. The cited passage in the Specification further describes that there is a one to one correlation between a particular synchronization state and a particular retiming state which may be referred to as a synchronization/retiming state pair. It is noted that this interpretation is illustrative and that Applicant is not limited to this interpretation. One having ordinary skill in the art can determine the scope of the claimed subject matter, including the phrase "particular synchronization/retiming state pair." Consequently, Applicant respectfully asserts that claims 4-11 and 16-22 are allowable under 35 U.S.C. §112, second paragraph.

V. REJECTIONS UNDER 35 U.S.C. §102(b)

The Examiner has rejected claims 1-2, 12-14 and 24 under 35 U.S.C. §102(b) as being anticipated by Jung et al. (U.S. Patent No. 5,887,040).

For a claim to be anticipated under 35 U.S.C. §102, each and every claim limitation must be found within the cited prior art reference and arranged as required by the claim. M.P.E.P. §2131. Applicant respectfully asserts that Jung does not disclose "a retiming mechanism configured to receive said serial data and said phases of said clock, wherein said retiming mechanism includes circuitry for reducing timing uncertainties in said serial data by selecting a particular phase of said clock to be asserted to sample said serial data during a period of said serial data" as recited in claim 1 and similarly in claim 13. The Examiner cites either element 203 or 204 of Jung as disclosing the above-cited claim limitations. Paper No. 3, page 6. Applicant respectfully traverses.

Jung instead discloses that element 203 of Jung receives the multi-phase clock pulse from the multi-phase clock pulse generating section and the retiming clock pulse select signals and synthesizes them in such a manner that the edges of the retiming clock pulse should occur at the center of the unit interval of the externally inputted data. Column 3, lines 52-60. Thus, element 203 of Jung does not receive serial data. Neither is there any language in Jung that discloses that element 203 reduces timing uncertainties in serial data. Neither is there any language in Jung that element 203 samples the serial data. Neither is there any language in Jung that element 203 selects a particular phase of a clock to be asserted to sample serial data during a period of the serial data.

Furthermore, Jung instead discloses that element 204 of Jung retimes the externally inputted data by utilizing the synthesized retiming clock pulse of the retiming clock pulse synthesizing section. Column 3, lines 61-63. Therefore, element 204 does not receive phases of a clock but instead the synchronized clock

pulse as illustrated in Figure 2. Neither is there any language in Jung that discloses that element 204 of Jung reduces timing uncertainties. Instead, Jung simply discloses that element 204 retimes the externally inputted data. Further, there is no language in Jung that discloses that element 204 selects a particular phase of a clock to be asserted to sample serial data. Neither is there any language in Jung that discloses that element 204 selects a particular phase of a clock to be asserted to sample serial data during a period of the serial data.

Thus, Jung does not disclose all of the limitations of claims 1 and 13, and Jung does not anticipate claims 1 and 13. M.P.E.P. §2131.

Jung does not disclose "wherein said particular phase of said clock to be asserted to sample said serial data during a particular period of said serial data corresponds to a particular retiming state" as recited in claim 2 and similarly in claim 14. The Examiner states that since the clock selection circuit 202 and the retiming synchronization circuit 203 shown in Figures 5-7 and 10 of Jung are integrated by logic circuits or gates that the above-cited claim limitation is necessarily disclosed by Jung. Applicant respectfully traverses. There is no language in Jung that either element 202 or element 203 samples serial data. Neither is there any language in Jung that either element 202 or element 203 discloses that a particular retiming state corresponds to a particular phase of a clock to be asserted to sample serial data during a particular period of the serial data. Thus, Jung does not disclose all of the limitations of claims 2 and 14, and thus Jung does not anticipate claims 2 and 14.

Furthermore, the Examiner must provide a basis in fact and/or technical reasoning to support the assertion that since elements 202 and 203 of Jung are integrated by logic circuits or gates that Jung discloses that a particular phase of the clock to be asserted to sample the serial data during a particular period of the serial data corresponds to a particular retiming state. *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). Since the Examiner has not provided such

evidence, the Examiner has not presented a *prima facie* case of anticipation in rejecting claims 2 and 14.

Applicant further asserts that Jung does not disclose "wherein said oscillator operates at a frequency lower than a data rate of said serial data" as recited in claim 12 and similarly in claim 24. The Examiner cites column 1, lines 7-13 of Jung as disclosing the above-cited claim limitation. Applicant respectfully traverses and asserts that Jung instead discloses that the present invention relates to an apparatus for retiming high speed digital data. There is no language in the cited passage that discloses an oscillator. Neither is there any language in the cited passage that discloses an oscillator operating at a frequency lower than a data rate of serial data. Thus, Jung does not disclose all of the limitations of claims 12 and 24, and thus Jung does not anticipate claims 12 and 24.

Furthermore, the Examiner must provide a basis in fact and/or technical reasoning to support the assertion that the disclosure of retiming high speed digital data discloses an oscillator operating at a frequency lower than a data rate of serial data. *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). Since the Examiner has not provided such evidence, the Examiner has not presented a *prima facie* case of anticipation in rejecting claims 12 and 24.

VI. ALLOWABLE SUBJECT MATTER:

Applicant appreciates the indication of allowability of claims 3 and 15.

VII. CONCLUSION

As a result of the foregoing, it is asserted by Applicant that claims 1-24 in the Application are in condition for allowance, and Applicant respectfully requests an allowance of such claims. Applicant respectfully requests that the Examiner call Applicant's attorney at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining issues.

Respectfully submitted,

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Attorneys for Applicant

By: 

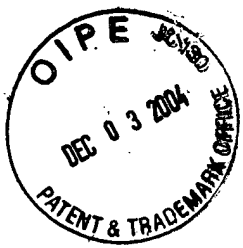
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IN THE DRAWINGS

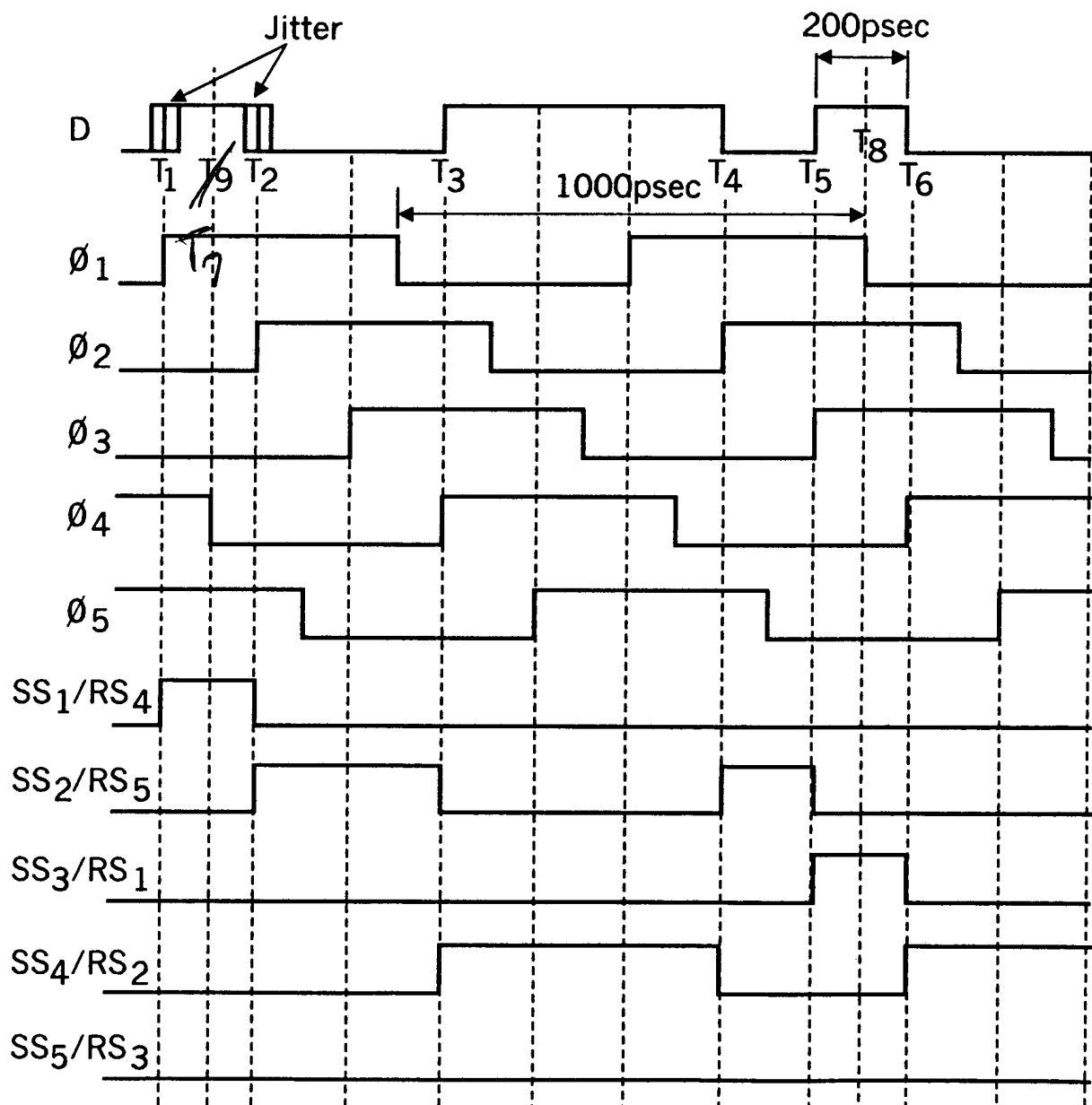
Please amend Figures 3, 6A-B and 7 as shown on the attached annotated sheets. Replacement formal drawings are also attached.



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Serial No. 09/820,512
Amendment to Office Action of 8/16/2004
Annotated Sheet Showing Changes

FIG. 3



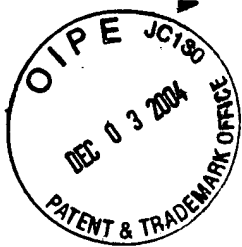
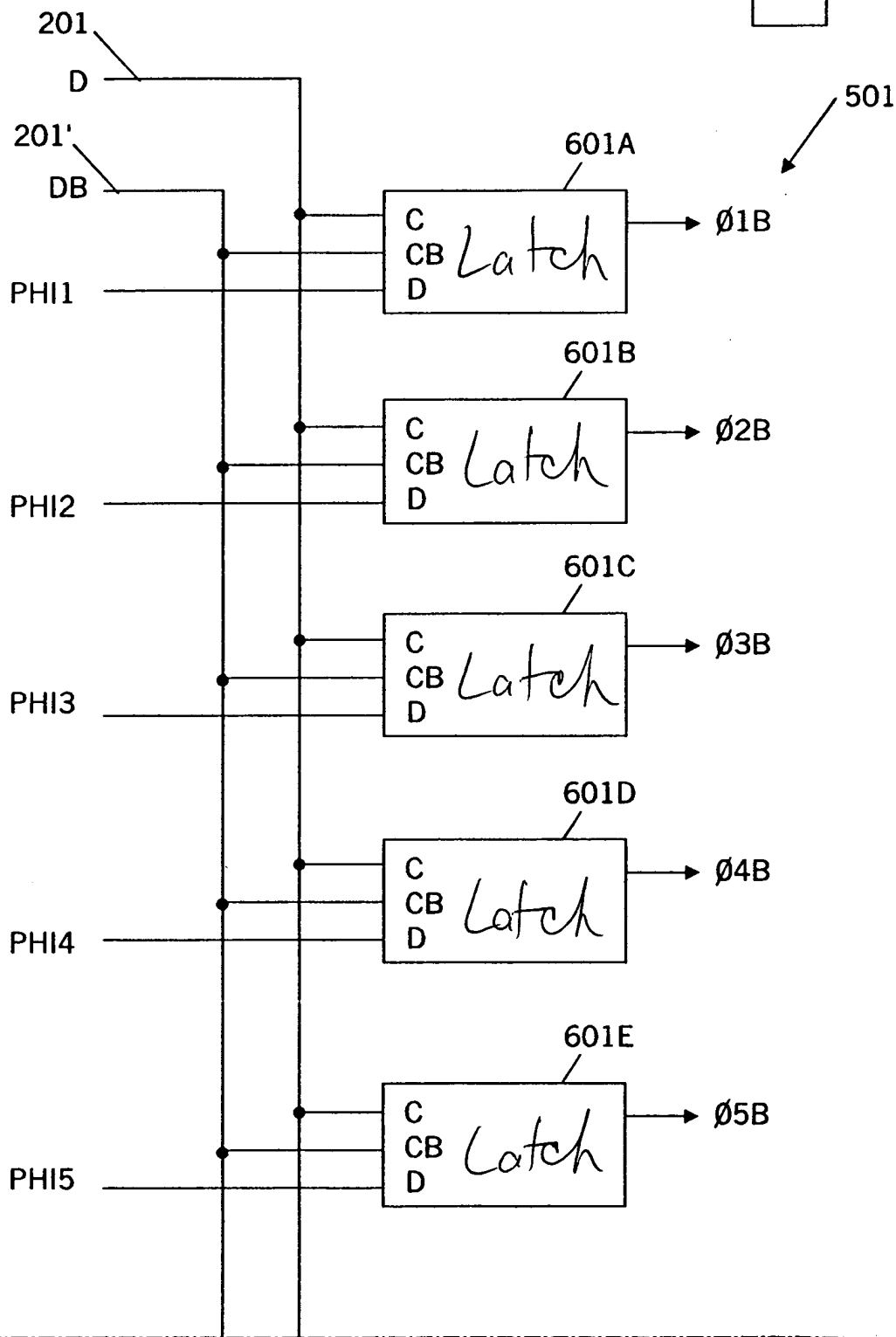


FIG. 6

FIG.
6A

FIG.
6B

FIG. 6A



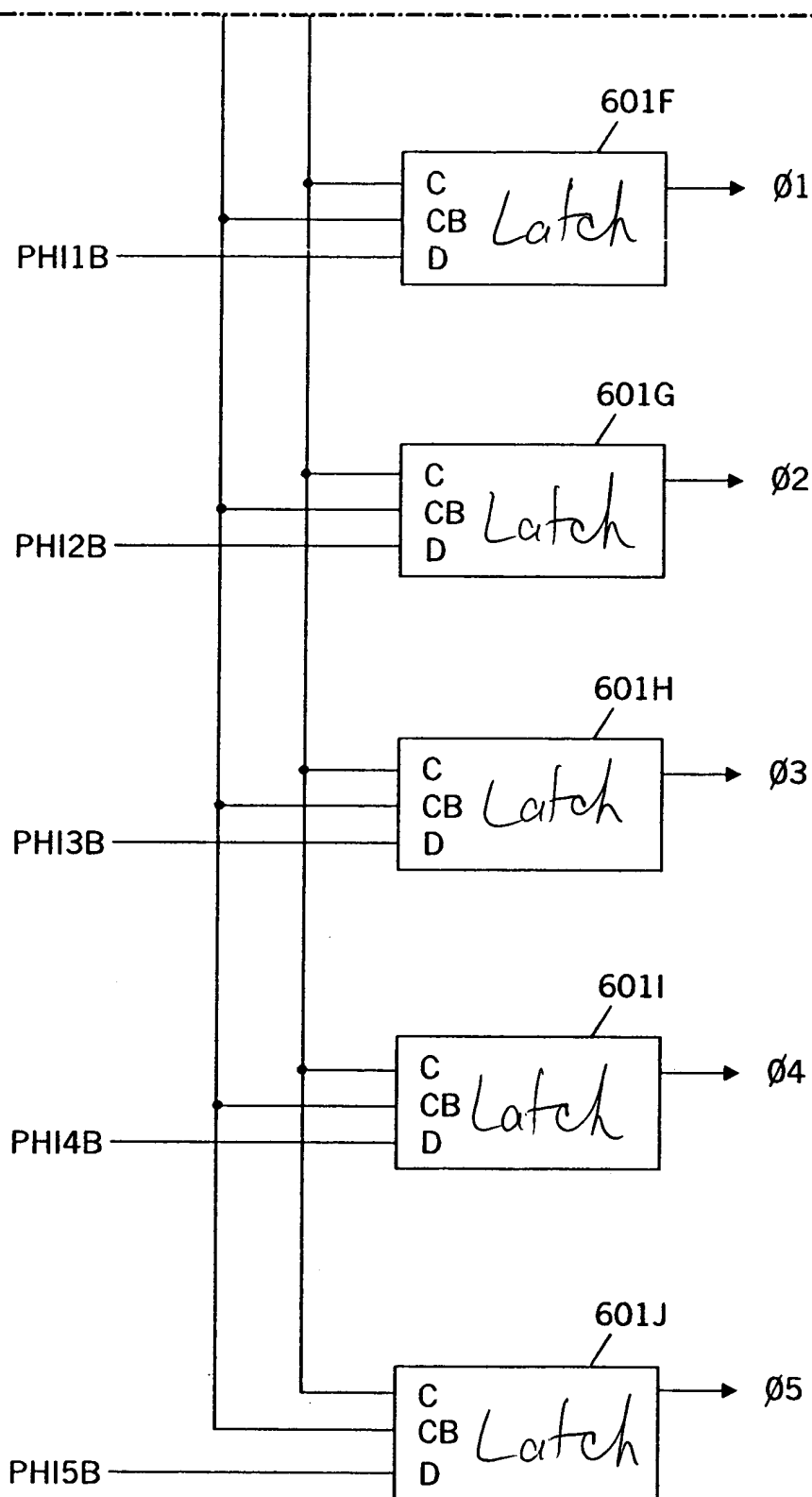


FIG. 6B



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FIG. 7

